

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated January 2, 2008. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

As outlined above, claims 1-6, 15-16, and 19-26 stand for consideration in this application, wherein claims 7-14 and 17-18 are being canceled without prejudice or disclaimer, while claims 1-2 and 15-16 are being amended. In addition, new claims 21-26 are hereby submitted for consideration.

All amendments to the application are fully supported therein, including paragraphs [0036], [0037], and [0058] of the specification and Fig. 1 in U.S. Publication No. 2005/0063264 A1 corresponding to the present application. Applicants hereby submit that no new matter is being introduced into the application through the submission of this response.

Prior Art Rejections

The First 35 U.S.C. §103(a) Rejection

Each of claims 1-6 and 17 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee et al (U.S. Pub. No. 2004/004921 A1) in view of Kobayashi et al. (U.S. Pat. No. 5,828,639). As mentioned above, claim 17 is being canceled, and therefore, the rejection of claim 17 is moot. The rejection of claims 1-6 is respectfully traversed for the reasons set forth below.

Claim 1

As recited in claim 1, a user data area and a control data area are formed on a disk-shaped information recording medium to which information is recorded or from which recorded information is produced by irradiation with an energy beam moving on/along a track relative to said medium. Data concerning a maximum linear velocity at a first location (V1max) and a minimum linear velocity at the first location (V1min) and a maximum linear velocity at a second location (V2max) and a minimum linear velocity at the second location (V2min) are recorded at a predetermined area of the disk-shaped information recording

medium. The first location is in an innermost area of the user data area and the second location is in an outermost area of the user data area.

In contrast, although Lee shows that “the maximum writing speed” and “the minimum writing speed” are recorded, “the maximum writing speed” in Lee means a so-called “N-tuple speed” of the recording, such as 2×speed, 4×speed, and 8×speed, and “the minimum writing speed” in Lee means a 1-tuple speed of the recording. (See paragraph [0008]). Clearly, “the maximum writing speed” and “the minimum writing speed” of Lee are not a maximum linear velocity and a minimum linear velocity at a certain location as recited in claim 1, respectively. Thus, a maximum linear velocity and a minimum linear velocity at a first location in an innermost area of the user data area and a maximum linear velocity and a minimum linear velocity at a second location in an outermost area of the user data area recited in claim 1 cannot read on “the maximum writing speed” and “the minimum writing speed” of Lee, respectively.

The secondary reference of Kobayashi merely shows the maximum linear velocity and the minimum linear velocity in each of the zones (Fig. 19). In Kobayashi, each zone into which a recording region is divided corresponds to each of the data units comprising recording units or playback units (Abstract, col. 2, lines 33-39). Kobayashi merely shows a table stipulating the relationship zones and the band to which a zone corresponds is stored at a ROM. (See col. 9, lines 49-55). Furthermore, a table shown in Fig. 19 does not show “a maximum linear velocity” and “a minimum linear velocity” at the same location, namely, a first location or a second location as recited in claim 1, along a radial direction of a recording medium. Furthermore, Kobayashi merely shows that a track number of a track in each zone is recorded on the disk, and the data including the maximum speed and the minimum speed of the track is read from the table stored in a ROM referring to the track number. Kobayashi does not show or suggest recording the data including the maximum speed and the minimum speed of the track are recorded on the disk.

As such, the secondary reference of Kobayashi fails to provide any disclosure, teaching or suggestion that makes up for the deficiencies in Lee. Therefore, at the time the invention was made, one of ordinary skill in the art could not and would not achieve all the features as recited in claim 1 by combining Kobayashi with Lee. Accordingly, claim 1 is not obvious in view of all the prior art cited.

Claims 2-6

As to dependent claims 2-6, the arguments set forth above with respect to independent claim 1 are equally applicable here. The corresponding base claim being allowable, claims 2-6 must also be allowable.

The Second 35 U.S.C. §103(a) Rejection

Each of claims 7, 8, 15, 16, and 18-20 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee in view of Akahira et al. (U.S. Pat. No. 5,729,513). As mentioned above, claims 7-8 and 18 are being canceled, and therefore, the rejections of claims 7-8 and 18 are moot. The rejections of claims 15-16 and 19-20 are respectfully traversed for the reasons set forth below.

Claims 15, 16

Claims 15 and 16 have the substantially same features as those of claim 1, at least with respect to the data concerning a maximum linear velocity ($V1_{max}$) and a minimum linear velocity ($V1_{min}$) at a first location in an innermost area of the user data area and a maximum linear velocity ($V2_{max}$) and a minimum linear velocity ($V2_{min}$) at a second location in an outermost area of the user data area is recorded at a predetermined area. As such, the arguments set forth above regarding Lee are equally applicable here.

Although the secondary reference of Akahira states that Fig 4 shows the relationship among the radial position of the recording/reproducing track on the disk, the rotational velocity of the disk, and the linear velocity of the disk (Fig. 4, col. 6, lines 61-65), Akahira merely shows a measured range of a linear velocity in each of a plurality of zones formed on an optical disk (col. 6, line 61 – col. 7, line 5). In other words, “the lowest and highest values of the linear velocities” in col. 6, line 59 of Akahira means the maximum linear velocity and the minimum linear velocity defined within a range which has a predetermined area as a zone. It has been well-known that a linear velocity changes according to a location along a radial direction of a disk, even if the rotational angular velocities are the same at different locations, as shown in col. 6, lines 47-53. Thus, “the lowest and highest values of the linear velocities” clearly show linear velocities at each of different positions along a radial direction. Clearly, Akahira’s linear velocity does not indicate a linear velocity at the same

location, namely, a first location or a second location on a disk as recited in Claims 15 and 16.

As such, the secondary reference of Akahira fails to provide any disclosure, teaching or suggestion that makes up for the deficiencies in Lee. Therefore, at the time the invention was made, one of ordinary skill in the art would not and could not achieve all the features as recited in claims 15 and 16 by combining Akahira with Lee. Accordingly, claims 15 and 16 are not obvious in view of all the prior art cited.

Claims 19-20

As to dependent claims 19-20, the arguments set forth above with respect to independent claims 15-16 are equally applicable here. The corresponding base claim being allowable, claims 19-20 must also be allowable.

The Third 35 U.S.C. §103(a) Rejection

Each of claims 9 and 12 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee and Akahira as applied to claims 7 and 8, and further in view of Sato (U.S. Pub. No. 2002/0064110 A1). As mentioned above, claims 9 and 12 are being canceled, and therefore, the rejection against claims 9 and 12 is moot. Accordingly, withdrawal of the rejection of claims 9 and 12 is respectfully requested.

The Fourth 35 U.S.C. §103(a) rejection

Each of claims 10 and 13 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee and Akahira as applied to claim 7, and further in view of Chen (U.S. Pub. No. 2003/0123352 A1). As mentioned above, claims 10 and 13 are being canceled, and therefore, the rejection against claims 10 and 13 is moot. Accordingly, withdrawal of the rejection of claims 10 and 13 is respectfully requested.

The Fifth 35 U.S.C. §103(a) rejection

Claim 11 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee and Akahira as applied to claim 7, and further in view of Mizuno et al. (U.S. Pat. No. 6,996,052). As mentioned above, claim 11 is being canceled, and therefore, the rejection of claim 11 is moot. Accordingly, withdrawal of the rejection of claim 11 is respectfully requested.

The Sixth 35 U.S.C. §103(a) rejection

Claim 14 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee and Akahira as applied to claim 7, and further in view of Morishima (U.S. Pub. No. 2003/0002409 A1). Claim 14 was rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Lee and Akahira as applied to claim 7, and further in view of Mizuno et al. (U.S. Pat. No. 6,996,052). As mentioned above, claim 14 is being canceled, and therefore, the rejection of claim 14 is moot. Accordingly, withdrawal of the rejection of claim 14 is respectfully requested.

New Claims 21-26

As to new dependent claims 21-26, the arguments set forth above with respect to independent claims 15-16 are equally applicable here. The corresponding base claim being allowable, claims 21-26 must also be allowable.

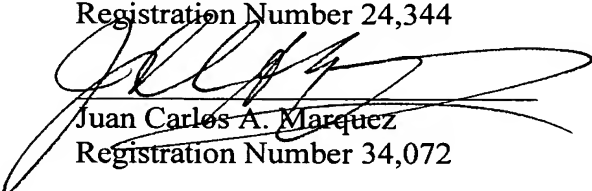
Conclusion

In light of the Amendments and Remarks, Applicants respectfully request early and favorable action with regard to the present application, and a Notice of Allowance for all pending claims is earnestly solicited.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344


Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

June 2, 2008
SPF/JCM/YOM